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WHAT IS CLAIMED IS:

1. An optical disk having at least a recording layer for recording information, said recording layer disk comprising:

5 a first recording area for recording contents data and data for recording and reproducing the contents data; and

a second recording area for recording secondary data on the contents recorded in the first recording area;

10 wherein said second recording area comprising:

a first section for recording control data on the second recording area;

15 a second section for recording data not to be inhibited to be outputted from a recording and reproducing apparatus for the optical disk; and

a third section for recording data to be inhibited to be outputted from the recording and reproducing apparatus for the optical disk;

20 wherein the control data recorded in the first section includes an identifier which shows whether said second recording area includes said third section or not.

2. The optical disk according to claim 1, wherein data recorded in the second recording area are stripe marks longer in radial direction and cannot be overwritten after  
25 they are written once.

3. The optical disk according to claim 1, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded in said second recording area.

4. The optical disk according to claim 1, wherein an identifier which shows whether information is recorded in said second recording area is recorded in said first section in said second recording area.

5. The optical disk according to claim 1, wherein the data for recording and reproducing the contents data in said first recording area include an identifier which shows whether information is recorded additionally in said second recording area and an amount of recorded data in said second recording area.

6. The optical disk according to claim 1, wherein ciphered data are recorded in said third section in said second recording area.

7. The optical disk according to claim 1, wherein a disk identifier different for each optical disk is recorded in said second recording area.

8. The optical disk according to claim 1, wherein said second recording area is provided at a predetermined area in an inner peripheral section or an outer peripheral section in the disk.

9. The optical disk according to claim 1, wherein data are recorded in said first recording area in the recording layer by generating uneven pits in a reflection film, and data are recorded by removing the reflection film partially as stripe marks longer in the radial direction.

10. The optical disk according to claim 1, wherein said first recording area is an area to which information can be written.

11. The optical disk according to claim 10, wherein said first recording area has said recording layer to which data can be recorded with an optical device.

12. The optical disk according to claim 11, wherein said first recording area has said recording layer to which data can be recorded with an optical device a plurality of times.

13. The optical disk according to claim 10, wherein said recording layer comprises an organic layer changeable between two states detectable optically.

14. The optical disk according to claim 12, wherein said recording layer comprises a magnetic layer having perpendicular magnetic anisotropy in a film normal direction.

15. The optical disk according to claim 14, wherein said barcode portions of second recording area has smaller perpendicular magnetic anisotropy along film normal direction than said non-barcode portions.

16. The optical disk according to claim 12, wherein said recording layer comprises a plurality of layered magnetic films.

17. The optical disk according to claim 10, wherein  
5 said recording layer comprises a recording layer made of Ge-Sb-Te alloy.

18. The optical disk according to claim 10, wherein  
10 said recording layer comprises a film changeable reversibly between two optically detectable states, an amount of reflection light from said first recording area is different from that from said second recording area.

19. The optical disk according to claim 18, wherein  
15 said recording layer is changeable reversibly between crystalline and amorphous states according to conditions of a light for illuminating said recording layer.

20. The optical disk according to claim 19, wherein  
said recording layer comprises barcode portions made of amorphous state and portions between the barcode portions made of crystalline state.

21. The optical disk according to claim 19, wherein  
20 said recording layer comprises barcode portions, and non-barcode portions between the barcode portions having a higher reflectivity than the barcode portions.

22. A method reproducing contents from an optical disk  
25 having at least a recording layer for recording information,

said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, comprising the steps of:

reproducing data from said second recording area before reproducing data from said first recording area;

deciding, based on control data included in data reproduced from said second recording area, whether the data reproduced from said second recording area include data to be inhibited to be outputted from a recording and reproducing apparatus for the optical disk to the external; and

processing the data to be inhibited to be outputted only in the a recording and reproducing apparatus when the data reproduced from said second recording area are determined to include the data to be inhibited to be outputted, without outputting the data to be inhibited to be outputted.

23. The method according to claim 22, wherein data are reproduced from said first recording area according to reproduction conditions included in the data to be inhibited to be outputted when the data reproduced from said second recording area are determined to include the data to be inhibited to be outputted.

24. The method according to claim 22, further comprising the steps of:

reproducing data from said first recording area;

and

5 detecting an identifier which shows whether data exist in said second recording area in the data reproduced from said first recording area;

10 wherein said step of reproducing data from said second recording area is performed only when the identifier is detected.

25. The method according to claim 22, wherein when the data reproduced from said second recording area are determined to include the data to be inhibited to be outputted, identification is performed by using data  
15 reproduced from the second recording area, and only when restriction on the output of the data in the first recording area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

26. The method according to claim 22, wherein when the  
20 data reproduced from said second recording area are determined to include the data to be inhibited to be outputted, information signals are generated based on the data, and the contents data are superposed and outputted with the information signals.

25 27. An apparatus for reproducing contents from an

optical disk having at least a recording layer for recording information, said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the apparatus comprising:

an optical head which reproduces information from the optical disk with an optical spot;

10 a first reproducing section which reproduces data with said optical head from the first recording area; and

a second reproducing section which reproduces data with said optical head from the second recording area;

15 wherein when data to be inhibited to be outputted are recorded in the second recording area, said second reproducing section processes the data only therein.

28. The apparatus according to claim 27, further comprising:

a detector which detects an identifier, which

20 shows whether information is recorded in the second recording area in the optical disk, from reproduced signals by the first reproducing section; and

a controller which moves said optical head to the second recording area when said detector detects the

25 identifier, reproduces control data from the second

recording area by said second reproducing section, and decides according to the control data whether the data to be inhibited to be outputted are included or not.

29. The apparatus according to claim 27, wherein said  
5 second reproducing section reproduces data in the second recording area according to a detection signal received by a photodetector provided in said optical head or a sum of detection signals received by a plurality of photodetectors provided in said optical head.

10 30. The apparatus according to claim 27, further comprising a second detector which detects whether a protective safety mode is set for the data in the first recording area in the optical disk, from reproduced signals from the second recording area by the second reproducing  
15 section, wherein when the setting of the protective safety mode is detected by said second detector, said first reproducing section performs identification by using data reproduced from the second recording area, and only when restriction on the output of the data in the first recording  
20 area is canceled, reproduced signals of data recorded in the first recording area are deciphered and decoded.

31. The apparatus according to claim 27, wherein the data to be inhibited to be outputted include a disk identification different for each optical disk.

25 32. The apparatus according to claim 27, wherein the



disk identification in the second recording area is ciphered, further comprising a key generator which generates a secret key for decoding the contents data in the first recording area by using a ciphered disk identification included in the second recording area.

33. The apparatus according to claim 32, wherein said second reproducing section performs verification by using the secret key generated by said key generator and deciphering and decoding for the contents data in the first recording area.

34. The apparatus according to claim 27, wherein ciphered data are recorded in the second recording area in the optical disk; further comprising:

a third reproducing section which decodes the ciphered data in the second recording area reproduced by said second reproducing section;

a cipher decoder for signals reproduced from the first recording area by said first reproducing section;

a first mutual authentication section provided in said third reproducing section; and

a second mutual authentication section provided in said cipher decoder;

wherein only when said first and second mutual authentication sections authenticate mutually, the ciphers reproduced from the first recording area are deciphered.

35. The apparatus according to claim 27, wherein said second reproducing section reproduces ciphered data to be inhibited to be outputted, further comprising a transmission section which transmits the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

36. An apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the apparatus comprising:

an optical head which reproduces information from the optical disk with an optical spot;

a first reproducing section which reproduces data with said optical head from the first recording area; and

a second reproducing section which reproduces data with said optical head from the second recording area;

wherein said second reproducing section generates information signals based on data to be inhibited to be outputted recorded in the second recording area, and said first reproducing section superposes the information signals

to signals reproduced from the first recording area and outputs the superposed signals.

37. The apparatus according to claim 36, further comprising:

5 a third reproducing section which reproduces the superposed signals generated by said second reproducing section;

a cipher decoder for signals reproduced from the first recording area by said first reproducing section;

10 a first mutual authentication section provided in said third reproducing section; and

a second mutual authentication section provided in said cipher decoder;

15 wherein only when said first and second mutual authentication sections authenticate identification mutually, the ciphers reproduced from the first recording area are deciphered.

38. The apparatus according to claim 36, wherein said second reproducing section reproduces ciphered data to be inhibited to be outputted, further comprising a transmission section which transmits the ciphered data reproduced by said second reproducing section and plaintext data reproduced from the second recording area through a connection line to an external apparatus.

25 39. A recording and reproducing apparatus for

recording and reproducing contents from an optical disk having at least a recording layer for recording information, said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the apparatus comprising:

a generator which generates information signals based on data inherent to the optical disk, recorded in the second recording area and inhibited to be outputted from the recording and reproducing apparatus, and

a recorder which superposes the generated information signals with predetermined signals and records the superposed signals to the first recording area or add them to the second recording area.

40. The recording and reproducing apparatus according to claim 39, wherein the signals to be superposed are watermarks generated by using a disk identification recorded in the second recording area.

41. The recording and reproducing apparatus according to claim 39, further comprising a watermark adder which adds watermark to the contents data in the first recording area, wherein said watermark adder generates watermarks based on data recorded in the second recording area and reproduced with an optical head, adds the watermarks to the contents

data and records the added data to the first recording area.

42. The recording and reproducing apparatus according to claim 39, further comprising:

5 a frequency converter which converts reproduced signals from the first recording area from time axis signals to frequency axis signals to provide first conversion signals;

10 a mixer which adds or superposes the first conversion signals to signals reproduced from the second recording area to provide mixed signals; and

a reverse frequency converter which converts the mixed signals from frequency axis signals to time axis signals to provide second conversion signals.

43. A recording apparatus for recording contents to an  
15 optical disk having at least a recording layer for recording information, said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents  
20 recorded in the first recording area, the apparatus comprising:

25 a cipher device which ciphers the contents based on data including information inherent to a disk, the information having been recorded in the second recording area;

a recording section which records the contents ciphered by said cipher device in the first recording area in the optical disk.

44. The recording device according to claim 42,  
5 further comprising a watermark decoder which decodes watermark information generated based on a disk identification from input signals, wherein when decoded data obtained by said watermark decoder has a predetermined value, said recording section ciphers the input signals based on  
10 the disk identification and records the ciphered signals to the optical disk.

45. The recording device according to claim 42, wherein said watermark decoder converts input signals from time space to frequency space and decodes watermarks by  
15 using the signals in the frequency space.

46. A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, said recording layer disk comprising  
20 a first recording area for recording ciphered contents data and data for recording and reproducing the ciphered contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the secondary data including a disk identification inherent to each optical disk, the apparatus comprising:

25 an optical head which reproduces information from

the optical disk with an optical spot;

a first reproducing section which reproduces data with said optical head from the first recording area; and

a second reproducing section which reproduces data with said optical head from the second recording area;

wherein said first reproducing section decodes the ciphered contents data by using the disk identification reproduced by said second reproducing section.

47. The apparatus according to claim 46, wherein said second reproducing section comprises a PE-RZ decoder.

48. The apparatus according to claim 46, wherein said second reproducing section comprises a device which suppresses high frequency components with cut-off frequency of 1.2 MHz PE-RZ decoder.

49. A reproducing apparatus for reproducing contents from an optical disk having at least a recording layer for recording information, said recording layer disk comprising a first recording area for recording contents data and data for recording and reproducing the contents data, and a second recording area for recording secondary data on the contents recorded in the first recording area, the secondary data including a disk identification inherent to each optical disk, the apparatus comprising:

an optical head which reproduces information from the optical disk with an optical spot;

a first reproducing section which reproduces data with said optical head from the first recording area; and

a second reproducing section which reproduces data with said optical head from the second recording area;

5            wherein said second reproducing section comprises a device which suppresses high frequency components with cut-off frequency of 1.2 MHz PE-RZ decoder and decodes the secondary data after suppressing high frequency components by the device.

10        50.        The apparatus according to claim 49, wherein said second reproducing section comprises a device which suppresses high frequency components with cut-off frequency of 1.2 MHz PE-RZ decoder.